ON AUSTRALIAN COLEOPTERA.

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PART IV.

FAMILY CHRYSOMELIDAE.

Plate iv and Text fig. 337.

THE insects dealt with in this part are mostly fungus-frequenting species. It will be noticed that *Diphyllus* and *Diplocoelus* are referred to the Erotylidae, instead of to the Mycetophagidae, the former family being now considered by many authors to be their true location.

COLASPOIDES CUPREOVIRIDIS sp. nov.

♂ Bright metallic coppery-green, under-surface less conspicuously metallic and tip of abdomen reddish; labrum, legs, antennae and palpi reddish, tips of antennae infuscated.

Head with fairly dense but irregular punctures between eyes, becoming smaller and sparser about base, and more crowded on clypeus; median line well-defined. Antennae rather long and thin, third joint no shorter than fourth. Prothorax about twice as wide as the median length, sides evenly rounded, all angles slightly armed; middle with rather small and not very dense punctures, becoming larger but not much denser on sides. Scutellum impunctate. Elytra rather short; with fairly large punctures, subgeminately arranged in parts, posteriorly confined to distinct striae, larger than elsewhere and transversely confluent behind shoulders. Apical segment of abdomen feebly transversely impressed, but in middle shallowly foveate. Legs rather short and stout; front femora acutely dentate; basal joint of front and middle tarsi dilated, of hind pair as long as the two following combined; hind tibiae longer than the others, gently emarginate on lower-surface beyond middle, and then dilated to apex. Length, 5–5·25 mm.

Hab. Queensland: Cairns district (F. P. Dodd). Type, I. 11998.

A bright-green species like *C. bicarinata*, *elegantula*, and *foveiventris*, but readily distinguished from these by the abdomen and hind tibiae: the latter are distinctly dilated near apex, but less suddenly and strongly than in *foveiventris*, and the abdominal fovea is shallower, with its outline less circular.

RHYPARIDA ALLENI Lea.

Two specimens, from Darwin, differ from the type in being smaller, 4–4·75 mm., prothorax with rather larger punctures, and the elytral ones without a water-logged appearance.

RHYPARIDA MEDIONIGRA Lea.

A specimen, from Cue (Western Australia), has the side of each elytron, but not the extreme margin, flavous throughout.

RHYPARIDA CAERULEIPENNIS Lea.

Three specimens, from Cairns, probably belong to this species, but have the legs mostly black, with a slight metallic gloss; one has the elytra purplish-blue, on the others they are brassy, with a slight greenish gloss. Two, from North-Western Australia, probably also belong to the species, their legs are mostly black; and elytra black with a slight coppery gloss. One, from Darwin, has the upper-surface bronzy with a greenish gloss, and the legs obscurely reddish; another has similar legs, but the elytra coppery-purple.

RHYPARIDA FUNEREA sp. nov.

Black, legs blackish-brown, tarsi, antennae (apical joints infuscated), palpi and labrum paler.

Head shagreened and with small punctures, except on clypeus, where they are denser and larger, median line slight. Eyes large, separated slightly more than the diameter of one. Prothorax about twice as wide as long, front angles armed; punctures dense, sharply defined, and of moderate size, becoming small in middle of apex. Elytra rather short, distinctly wider than prothorax; with rows of large punctures, becoming smaller (but not very small) posteriorly, interstices with minute punctures. Flanks of prosternum distinctly striated throughout. Legs stout; femora edentate; claws bifid. Length, 4·5–5 mm.

Hab. Northern Territory: Darwin and Stapleton (G. F. Hill). Type, I. 11981.

A second specimen differs from the type in having the scutellum, elytra, and under-surface of the same dingy-brown colour as the legs. The type in my table of the genus(1) would be associated with *R. crassipes*, which is a considerably narrower species, with coarser punctures, eyes more distant, head and prothorax shining, etc.; the second specimen would be associated with *R. mayae*, which is a narrower species, with the head but not the prothorax shagreened.

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(1) Lea, Trans. Roy. Soc., S.Aust., 1915, p. 112.

RHYPARIDA BIVITTIPENNIS sp. nov.

Reddish-castaneous, legs (knees infuscated), antennae and palpi paler, elytra with a blackish vitta on each side from base to near apex.

Head convex and with minute punctures, except in front and on the clypeus, where they are fairly large and sharply defined; median line short. Eyes large and widely separated. Prothorax not twice as wide as the median length, front angles armed; punctures small and rather sparse in middle, becoming larger and denser, but somewhat irregular on sides. Elytra with rows of rather large punctures, becoming smaller posteriorly. Flanks of prosternum striated from base to apex, the striae becoming very faint near the margins. Femora stout, all distinctly dentate; claws bifid. Length, 4·5–5 mm.

Hab. Northern Territory: Darwin (G. F. Hill, No. 237; and W. K. Hunt).

Some of the specimens are of a brighter red than others; one is almost flavous, with the vittae reduced to rather small infuscated spots, another has the vittae shorter than usual, with the apex of elytra flavous; each vitta usually occupies about one-third of the base, but about two-thirds posteriorly, on one specimen it extends to the apex itself; parts of the under-surface are sometimes infuscated. The prothorax has some coarse, irregular punctures, but not in oblique rows as in *R. polymorpha*; passing that species in my table, it would be associated with *R. maculicollis* and *R. melvillensis*, from the former it is distinguished by its wider form, sparser and stronger prothoracic punctures and differently coloured elytra, and from the latter by its smaller size, very different colour and finer elytral punctures.

RHYPARIDA SEMIOPACA sp. nov.

Flavous, each elytron with a black lateral vitta.

Head opaque and with scarcely visible punctures, even on the clypeus; median line short. Eyes rather large and widely separated. Prothorax about twice as wide as long, greatest width at basal third, all angles armed; surface opaque and impunctate. Elytra with rows of not very large punctures, becoming very small posteriorly; interstices with scarcely visible punctures. Flanks of prosternum with abbreviated striae near coxae. Femora stout and rather feebly dentate; claws bifid. Length, 4 mm.

Hab. Northern Territory: Darwin (G. F. Hill, No. 209). Type, I. 11983.

Parts of the prosternum are very finely striated, but the striae are not continuous from base to apex; this character, and the opaque, impunctate prothorax, readily distinguish the species from the preceding one, to which, at first glance, it appears to belong. The elytral vittae are rather narrow at the base, but dilate posteriorly till they cover most of the surface; on the two specimens in the Museum they terminate just before the apex. In my table it would be placed in I, *mm*, with *R. didyma*, which is a much larger and otherwise very different species. *R. mediovittata* has the elytral markings shorter and not touching the sides, and the prothorax bimaculate.

RHYPARIDA NIGRIVENTRIS sp. nov.

Castaneo-flavous, an apical U on elytra, and abdomen black; knees, tips of tibiae, tarsi and apical two-thirds of antennae infuscated.

Head subopaque with scarcely visible punctures, except on clypeus, where there are a few distinct ones; front of clypeus conspicuously notched. Eyes rather large and widely separated. Prothorax subopaque, twice as wide as long, sides evenly rounded, all angles armed; punctures sparse and small. Elytra distinctly wider than prothorax; with rows of not very large punctures, becoming inconspicuous posteriorly. Femora stout and unarmed; claws bifid. Length, 4–4·25 mm.

Hab. Northern Terirtory: Darwin. Type, I. 11984.

The sides of the U are about half the length of the elytra, on one specimen its sides are entire, on another each side is encroached upon by the flavous portion. From some directions parts of the flanks of the prosternum appear to be very feebly striated. In my table the species would be referred to I, and from the two species placed there, *R. trimaculata* and *didyma*, it differs in being much smaller, and very differently coloured.

RHYPARIDA OBLIQUA sp. nov.

Pale castaneo-flavous.

Head without punctures, except for a few minute ones at base and on clypeus; median line faint. Eyes rather large and widely separated. Prothorax at base about twice as wide as the median length, sides obliquely diminishing in width to apex, angles unarmed; impunctate or almost so. Elytra rather short; with rows of punctures of moderate size, becoming much smaller posteriorly. Femora stout, edentate; claws bifid. Length, 4·5–5 mm.

Hab. Northern Territory: Darwin, in January (G. F. Hill). Type, I. 11985.

The prosternum is without striae, even near the coxae; the elytral punctures are not very large, their true sizes may be noted from oblique directions, but owing to "water-logging" on several of the, six, specimens before me they appear to be very large, even near the apex. Even the tips of the antennae are not infuscated. Readily distinguished from the other pale species of the genus by the oblique sides of prothorax, each of these being quite straight from base to apex, with the angles not projecting outwards; in my table it would be associated with *R. pallidula,* which has the sides of the prothorax rather strongly rounded, and the disc with distinct punctures.

EDUSA SUTURALIS Chp.

Five females, from Kulpara (South Australia), have the elytra (except as to their clothing) entirely black.

EDUSA SERICEA Lea.

A specimen, from Beverley (Western Australia), is of a beautiful golden-red, its elytra in some lights have a purplish gloss, and on each several purplish-blue lines may be seen through the pubescence.

EDUSA MULTICOLOR sp. nov.

♂ Coppery-green, most of elytra golden-red or golden-purple, under-surface bronzy, tibiae, basal joints of palpi and basal half of antennae more or less reddish. Head, sides of prothorax, under-surface and legs with fairly dense, white pubescence, elytra with stouter but sparser clothing.

Head shagreened and with fairly dense punctures; median line shallow at base, fairly deep and triangularly dilated in front. Antennae rather long. Prothorax about twice as wide as long, sides evenly rounded; with fairly dense, subasperate punctures, in places transversely confluent. Scutellum with numerous punctures. Elytra with dense punctures, on basal half mostly transversely confluent. Abdomen with basal segment glabrous and finely striated in middle, fifth almost simple. Femora stout, front pair acutely dentate; basal joint of all tarsi somewhat inflated; hind tibiae dilated at apex, apical slope bisinuate, inner edge straight. Length, 5·5–7 mm.

♀ Differs in being larger and wider, much less of upper-surface green, antennae and legs shorter, abdomen with less of basal segment glabrous, and the fifth simple and less encroached upon by pygidium.

Hab. Victoria: Sea Lake (J. C. Goudie, No. 769). Type, I. 11987.

A beautiful species, in appearance rather close to *E. diversicollis,* but less elongate and hind tibiae of male with the inner edge straight, and scarcely different from that of the female. On the male a fairly large subtriangular space about the scutellum is green, the colour then changes, through various golden shades, till on the sides and apex it becomes a beautiful purple, the sides of the prothorax also have a purplish gloss; the female is mostly golden, on the head the only parts green are the clypeus and labrum, the scutellum and the suture for a short distance behind it are green; more of the elytra is purple than on the male, but the purple is not so bright. On the elytra the white setae are slightly fasciculate in appearance, but they do not form true fascicles, they are absent from a fairly large subtriangular space about the base. The prothorax is very finely transversely striated, so as to appear shagreened.

EDUSA OBSCURA sp. nov.

Black, in parts with a rather slight metallic gloss; labrum, parts of five basal joints of antennae, parts of palpi, and bases of tibiae more or less reddish. Densely clothed with short, ashen pubescence.

Head with dense but more or less concealed punctures; median line narrow. Prothorax with punctures much as on head; front angles rather acutely armed. Elytra with crowded and rather coarse punctures, posteriorly almost confined to striae, interspaces with rather dense and small punctures. Apical segment of abdomen with a wide, shallow depression in middle. Femora stout, subangulate, but scarcely visibly dentate; basal joint of front tarsi slightly inflated. Length, 7 mm.

Hab. New South Wales: Blue Mountains (Dr. E. W. Ferguson). Type (unique), I. 11988.

The metasternum has a distinct purplish gloss, and parts of the upper-surface are slightly brassy or purplish. The three apical joints of antennae are missing from the type, the second joint is stouter than the third, but scarcely half its length. On each elytron two geminate rows of punctures may be traced from the base to beyond the middle, when they converge to become the striae of the apical slope, although the punctures are dense and rather coarse, especially behind the shoulders, they are nowhere distinctly confluent. The front femora from above appear to be edentate, but from below a feeble tooth may be noticed. The apical segment of the abdomen is irregularly impressed, but as the basal one is strongly convex, the sex of the type is doubtful. In my table would be associated with *E. ursa*, from which it differs in being much larger, differently coloured, prothorax with distinct punctures, and elytral punctures larger and some in geminate rows; it is closer to *E. impressiceps*, but is somewhat larger, only feebly metallic, and legs, except the extreme bases of tibiae, entirely black. It is considerably larger than all the non-metallic species.

EDUSA CAPILLATA sp. nov.

Black with a bronzy gloss, front of head coppery-green, labrum, antennae (upper-surface of basal joint and tips of six apical ones infuscated) and basal joints of palpi more or less flavous, or reddish. Densely clothed with ashen pubescence, mixed with longer and more or less erect hairs.

Head shagreened and without distinct punctures, except on clypeus. Antennae rather long and thin. Prothorax shagreened and with very minute punctures. Elytra with crowded punctures, but fairly large only on basal half. Abdomen glabrous along middle, apical segment shallowly depressed towards each side, and with a rather large, round fovea, in middle. Front femora stout and acutely dentate. Length, 6·25 mm.

Hab. New South Wales: Mittagong (Dr. E. W. Ferguson). Type (unique), I. 11989.

Parts of the under-surface have a greenish or coppery gloss. On the prothorax the pubescence is rather longer and denser on the margins than the disc; on the elytra there are quite distinct lines of pale pubescence, although not sharply defined, about nine on each elytron; the longer hairs are very conspicuous on the elytra from the sides, and are distinct, although much shorter, on the prothorax. The type is probably a male, and, in my table, would be associated with *E. aenea*, but is larger, darker, legs entirely black, elytra with denser clothing, the long hairs longer and more numerous, and scutellum not green.

EDUSA PUNCTIPENNIS sp. nov.

♂ Coppery-bronze; labrum, antennae (except tips of some joints), legs (knees infuscated) and basal joints of palpi more or less reddish. Rather densely clothed with ashen or white pubescence, the elytra, in addition, with long, suberect, darker hairs.

Head and prothorax shagreened and with small punctures. Elytra with dense and rather large punctures, becoming smaller posteriorly and nowhere confluent. Abdomen with a small fovea on fifth segment. Legs stout; front femora slightly dentate; hind tibiae simple. Length, 5–5·25 mm.

♀ Differs in having abdomen more convex, nonfoveate, and antennae and legs somewhat shorter.

Hab. Victoria: Aspendale (Dr. E. W. Ferguson). Type, I. 11972.

The front femora are feebly dentate, but from below the tooth is sufficiently distinct. Regarding the species as belonging to D, of my table, it would be associated with *E. tridens,* to which it is certainly close, and from which it differs in being slightly smaller, the male nowhere green, rather more brassy than bronzy, similar in colour to its own female, and the elytra with coarser punctures and longer clothing. Regarding it as belonging to D D, it might be associated with *E. fraterna,* with which it agrees well in colour, except that the femora are paler, and that the elytral clothing is darker, the elytral punctures are also distinctly coarser, and those of the prothorax much finer, although fairly distinct before abrasion. In colour it is close to some specimens of *E. aenea,* but the elytra are without defined lines of clothing, and are more coarsely sculptured; structurally it is close to *E. melanoptera*, but is conspicuously metallic, and the elytral clothing is decidedly longer.

GELOPTERA ARMIVENTRIS Lea.

Two females, from Thursday Island, appear to belong to this species; they differ from the male in having somewhat shorter legs, hind tibiae without produced apical spur, and abdomen more convex and simple.

GELOPTERA APICILATA sp. nov.

♂ Piceous-brown with a bronzy gloss, parts of under-surface paler; labrum, legs (knees and claws infuscated), basal third of antennae and palpi flavous.

Head with fairly dense and sharply defined punctures. Eyes rather large and prominent. Prothorax about twice as wide as long, sides almost evenly rounded, angles unarmed; punctures much as on head, but somewhat larger near hind angles than elsewhere. Elytra with dense and fairly coarse punctures, becoming confined to striae posteriorly, interspaces with minute punctures. Abdomen finely transversely strigose and with numerous subasperate punctures; fifth segment with a small, transverse, median fovea. Femora stout and edentate; hind tibiae with apical third dilated and bent outwards; basal joint of front and of middle tarsi dilated. Length, 5 mm.

Hab. North-western Australia: Wyndham (J. Clark from W. Crawshaw). Type, I. 11999.

In size and general appearance very close to *G. tuberculiventris*, but hind tibiae very different, abdomen not tuberculate and sides of prothorax different; it is still closer to *G. rhacbocnema*, but the hind tibiae are shorter and somewhat wider at apex, with the whole of the dilated part bent outwards, and the basal two-thirds distinctly thinner, the fourth segment of the abdomen is slightly smaller (slightly shorter than the second and third combined) and not transversely depressed, the fifth has the lateral depressions less pronounced, and the median fovea more abrupt; the punctures of the upper-surface are also somewhat smaller and sparser. The type has three small, slightly elevated, impunctate spaces on the front of the head, but a second specimen is without such.

GELOPTERA VIRIDIMARGINATA sp. nov.

♂ Black with a coppery or bronzy gloss, margins of prothorax and of elytra, and parts of under-surface dark green; labrum, tip of abdomen, and parts of legs obscurely flavous, or testaceous.

Head with dense, sharply defined punctures. Eyes large and prominent.

Prothorax scarcely twice as wide as the median length, sides evenly rounded, front angles unarmed; with dense and fairly large punctures becoming crowded on sides, interspaces with minute punctures. Scutellum impunctate. Elytra with punctures fairly large throughout and in places transversely confluent, but with an impunctate line on each from base to apex, and remnants of two others. Abdomen with fairly dense, more or less asperate punctures, in places finely strigose; apical segment with a wide median fovea, its middle rather deep. Femora stout, edentate; hind tibiae moderately long, slightly dilated to apex, inner edge straight almost throughout. Length, 7·5–8·5 mm.

♀ Differs in being more robust, prothorax more transverse, abdomen more convex and non-foveate, and legs shorter, with basal joint of front tarsi smaller.

Hab. Western Australia: Kellerberrin (J. Clark from W. Crawshaw). Type, I. 11967.

In my table would be associated with *G. hardcastlei,* from which the male differs in having smaller eyes, prothorax more rounded in middle, and basal segment of abdomen in parts densely and finely striated, and with more numerous punctures. The head of the male has been damaged, and its antennae and palpi are missing; on the female the antennae are of a dingy flavous, with the tips of five joints infuscated; its palpi are entirely flavous; on both specimens there is a short, impunctate, median line, near the base of the pronotum.

GELOPTERA SOROR sp. nov.

♂ Black with a coppery or bronzy or coppery-green gloss; labrum, base of antennae, palpi, tip of abdomen and base of femora more or less obscurely reddish.

Head with crowded and sharply defined punctures, but in places confluent; with a vague median line. Antennae long and thin. Prothorax about once and two-thirds as wide as the median length, sides gently rounded, hind angles only armed; with crowded punctures, slightly larger than on head. Scutellum impunctate. Elytra much wider than prothorax; with crowded punctures, many of which are transversely confluent, but leaving some feebly defined impunctate lines, which posteriorly are marked off by striae. Abdomen faintly transversely striated, and with rather small punctures, apical segment with a wide impression. Femora unarmed; hind tibiae longer than the others, rather thin and curved in middle. Length, 8 mm.

Hab. Western Australia: Beverley (E. F. du Boulay). Type, I. 11968.

In general appearance very close to the preceding species, from which it may be distinguished by the abdominal fovea; on the present species this is fairly deep and extends as an even impression across more than one-third of the segment; on that species it is suddenly deepened in the middle, the deep part being hardly more than one-fifth the width of the segment; on the present species also the punctures of the upper-surface are more crowded, the legs are darker, and the hind tibiae curved. In my table it would go with *G. hardcastlei*, from which it differs in the basal and apical segments of abdomen, evenly rounded sides of prothorax, smaller eyes and more crowded punctures.

GELOPTERA APICIVENTRIS sp. nov.

♂ Bright, metallic bluish-green, in parts with a faint coppery gloss; labrum, most of antennae, and parts of palpi and of legs more or less reddish.

Head with fairly dense and sharply defined punctures, a vague depression in middle; a small, highly polished, coppery spot near each antenna. Eyes large and rather widely separated. Antennae rather long and thin. Prothorax not twice as wide as the median length, sides almost evenly rounded, hind angles only armed; with rather large, sharply defined punctures somewhat irregular in middle, crowded on sides. Elytra with crowded and rather large punctures, a few transversely confluent before middle, posteriorly near suture confined to striae. Abdomen with basal segment depressed in middle, margins of intercoxal process narrowly elevated, fourth segment large, a wide depression on each side of middle, fifth segment foveate and red in middle, with a distinct central granule. Femora stout, front ones rather minutely dentate; hind tibiae elongate, apical fourth dilated. Length, 5–5·25 mm.

Hab. Northern Territory: Darwin. Type, I. 11970.

In general appearance close to *G. intercoxalis*, but legs darker, front femora dentate, abdomen with the ridge on each side of intercoxal process not passing the coxa, and two apical segments different.

ALITTUS CARINATUS Blackb.

On the type and on several other specimens of this species, the elytra are uniformly coloured, except that on some parts the green sheen is more conspicuous than on others; but on three Darwin specimens there are three conspicuous pale lines on each elytron, the punctures between the first and second lines are in four irregular rows; on three others the pale lines are present, but more feebly defined.

ALITTUS FLAVOLINEATUS sp. nov.

♀ Reddish-castaneous, in parts with a coppery, or bluish, or purplish gloss; antennae, palpi, and three distinct lines on each elytron flavous. Head, prothorax, under-surface and legs with depressed, white pubescence, tips of elytra slightly pubescent.

Head with irregularly distributed punctures, sharply defined only on clypeus. Prothorax twice as wide as long, sides almost evenly rounded, angles slightly armed; with large and irregularly distributed punctures, leaving numerous small, subtubercular, impunctate elevations. Scutellum impunctate. Elytra rather wide, slightly diminishing in width from shoulders; with large, round, deep punctures, irregular about base, more or less lineate in arrangement elsewhere. Legs stout; femora edentate. Length, 8–9 mm.

Hab. North-western Australia: Forrest River (J. Clark from W. Crawshaw). Type, I. 11996.

Readily distinguished from all other described species, except *A. carinatus*, by the striped elytra and from the striped variety of that species by the punctures between the first and second stripes being in two rows only, and individually much larger. The sides of the prothorax at first glance appear to be quite evenly rounded, but on close examination faint indications of teeth may be traced on two, of the three, specimens before me.

TOMYRIS SUBLAETA Lea.

Four specimens, from the Blue Mountains, evidently belong to this species, but differ considerably from the types in colour; one has the head, except for a vivid green strip in front, prothorax, scutellum and elytra, of a beautiful golden-red; the others have the head, except at base, and scutellum green, with a wide median portion of the prothorax and elytra golden-red, or brassy.

TOMYRIS NIGRA sp. nov.

♀ Black, with a slight bronzy gloss, less distinct on the elytra than elsewhere, parts of four basal joints of antennae, basal joints of palpi and knees reddish. Elytra with moderately long and not very dense, subereet, white pubescence; much shorter but denser elsewhere.

Head with crowded, asperate punctures. Antennae with five apical joints stouter than usual. Prothorax with a shallow and irregular but distinct impression across middle; punctures slightly larger than on head. Elytra with large, irregular punctures, larger (especially behind shoulders) at basal third than elsewhere, but becoming rather small about apex. Length, 5·25 mm.

Hab. New South Wales: Blue Mountains (Dr. E. W. Ferguson). Type (unique), I. 11993.

In size and colour much like the female of *T. obscura*, but the punctures are much larger and more sharply defined, the five terminal joints of antennae are wider and the clothing is different; in my table it would go with *T. villosa*, but differs from the female of that species in being considerably larger, black with but a slight metallic gloss, and with much larger elytral punctures.

CLEORINA PURPUREA Lea.

On several specimens of this species the upper-surface is of a more or less brassy-green, or blue.

MEGASCELOIDES ARROWI sp. nov.

♂ Castaneous-brown or piceous-brown, antennae paler but some joints infuscated. Clothed with moderately long, white, depressed pubescence or setae, denser on sides of metasternum than elsewhere.

Head with dense but partially concealed punctures; with a vague median line. Antennae rather long, eleventh joint longer than tenth and acutely pointed. Prothorax not twice as wide as long, sides gently rounded, angles slightly projecting; with small and moderately dense punctures. Elytra slightly wider than widest part of prothorax, parallel-sided to near apex; with dense and rather coarse punctures, in places transversely confluent, towards apex with convex interstices between punctate striae. Apical segment of abdomen flattened in middle, with an oblique impression towards each side. Legs stout and moderately long, basal joint of front tarsi inflated, claws acutely bifid. Length, 7–8·5 mm.

♀ Differs in having somewhat shorter and stouter antennae, prothorax fully twice as wide as long, apical segment of abdomen simple, basal joint of front tarsi smaller, and claws almost simple.

Hab. Western Australia: Cue (H. W. Brown); Northern Territory: Tennants' Creek (J. F. Field). Type, I. 3410.

In general appearance fairly close to *M. squamosus* Baly., but the prothoracic punctures smaller, and elytra without conspicuous erect hairs. In some respects it appears close to the description of *Terillus duboulayi* Baly., but on that species the antennae are said to be "not half the length of the body" and the elytra to be "covered with white and pale fuscous scales, arranged in broad, ill-defined vittae." On six specimens of the present species the clothing is uniformly white and the antennae, even on the female, are more than half the length of the body, the legs are also darker than noted for those of *duboulayi*; from the description of *M. perplexus* Baly., it differs in being considerably larger, eyes not entire, and abdomen and legs considerably darker.

In naming this species after Mr. Gilbert J. Arrow, I would like to place on record my gratitude to him for the invariable courtesy I have received from him, in clearing up the synonymy of species whose types are in the British Museum, in answering enquiries about others, and for the examination of cotypes and other authentic specimens.

MACRAGONUS METALLICUS sp. nov.

Blackish or purplish, with a conspicuous coppery-green gloss; muzzle (tips of mandibles excepted), scutellum, palpi, under-surface, coxae, and femora (except knees) red; basal joint of antennae metallic green, five following joints shining purple, the others opaque purple.

Head with sparse and small punctures; with a shallow inter-ocular, triangular depression, each angle of which is marked by a small fovea. Prothorax about twice as wide as long; each side with three large teeth: the largest one median, the next apical and about half its size, the other and smallest one basal; a fairly large fovea on each side of middle, in line with antennae; punctures somewhat larger and sparser than on head. Scutellum triangular. Elytra much wider than prothorax; each with three irregular foveae triangularly placed: the largest about two-fifths from the base and one-third from the suture, the smallest not quite half-way between it and the base, the other (a rather ill-defined one) marginal; with rows of rather distantly placed punctures, fairly large at the base, almost disappearing posteriorly. Length, 11·5–12 mm.

Hab. Australia (Blackburn's collection); Queensland: Kuranda (G. E. Bryant). Type, I. 4181.

From some directions the whole upper-surface appears dark metallic-green, from others metallic-purple, except that some of the punctures appear as glittering green spots. On the type some of the under-parts of the tibiae are obscurely reddish. The specimen from Kuranda (returned to Mr. Bryant) has the head red to the base, the extreme base of elytra obscurely diluted with red, the knees not green, and most of the tibiae reddish; the punctures on its head are larger than on the type, its inter-ocular depression is deeper, but its hind angle not foveate, punctures on prothorax larger, less sparse, and somewhat crowded on the largest tooth on each side, the elytral punctures are also larger. I believe the differences to be individual, rather than sexual, and that each is a male.

MACROGONUS MACULATUS sp. nov.

Plate iv, fig. 1.

♂ Metallic purplish-blue; a large spot at base of head, pronotum (except for a large medio-basal spot), prosternum, and parts of mesosternum and of metasternum blood-red; elytra flavous, a short portion of suture, a small space on each side of scutellum, and ten isolated spots purplish-blue; parts of muzzle reddish, five basal joints of antennae shining, the others opaque.

Head with punctures of irregular size and irregularly distributed; a deep median line, from summit of clypeus halfway to base. Prothorax gently and almost evenly convex, not much wider than long, each side with a large and fairly acute tooth in middle, each angle with a smaller tooth, middle of apex conspicuously incurved; punctures sparse and small. Elytra much wider than base of prothorax; with rather small punctures, more or less seriate in arrangement. Length, 11·5–13·5 mm.

♀ Differs in having the prothorax much smaller, the sides evenly and rather gently rounded in middle, front angles concealed from above, each side of disc with a small fovea, apical incurvature wider and less pronounced, abdomen more convex, and legs and antennae somewhat shorter and thinner.

Hab. Queensland: Cairns district (F. P. Dodd and G. E. Bryant). Type, I. 4773.

Readily distinguished from all other described species of the genus by the spotted elytra, the spots on each are: one on the shoulder, a small one (marking the position of a shallow fovea) on the side near the base, one level with it but near the suture, a central one slightly beyond the middle, and one halfway between it and the apex. The sexual differences of the prothorax are very striking; on the female (returned to Mr. Bryant) the postmedian spot on each elytron is about twice the size of the subapical one, the latter being halfway between the suture and side; on the male the subapical one is larger than the postmedian one, and almost touches the margin.

FAMILY EROTYLIDAE.

EPISCAPHULA DUPLOPUNCTATA Blackb.

E. nigrofasciata, Blackb., var.

E. subapicalis Lea, var.

The type of *E. duplopunctata* appears to be a rather rare form of the species, subsequently named *E. nigrofasciata.* Its prothorax is without larger punctures along the median third, the punctures in the elytral series are slightly larger than usual, the smaller ones on the interstices are more numerous and slightly more conspicuous than usual. Some specimens from Queensland, including a cotype of *E. nigrofasciata,* have identical markings, and of these some have elytral punctures exactly the same, and others have the prothoracic ones similar. It occurs in Northern Territory, Queensland, and New South Wales. A specimen, from Sydney, as small as the type (Queensland specimens are usually slightly larger) has prothoracic punctures exactly the same, but on the elytral interstices the punctures are very minute. The species is also extremely close to some of the forms of *E. australis,* and I am doubtful as to whether it should not be regarded as a form of that species.

The form I named *E. subapicalis* as a variety of *E. termitophila* (*termitophila* itself, however, is distinct by its more dilated middle parts, and elytra with only two series of red markings, instead of three) appears also to belong to the species, but has the black basal fascia of the elytra continuous, instead of twice interrupted to the base itself; it appears to be the commonest form of the species, and extends from Cairns, in Queensland, to Derby, in North-Western Australia.

var. OBSCURICOLLIS var. nov.

Ten specimens from Queensland (Cooktown, Cairns, Bowen, and Gayndah) and one from New South Wales (Dorrigo) may be considered as representing another variety, having the dark prothoracic blotch ill-defined, and extended so as to cover the whole surface except a narrow space at the apex, or an obscure space in each front angle; each elytron has three reddish transverse spots or fasciae: one subbasal, with a short medio-frontal extension, one postmedian, its concave side towards the apex, the other and smaller one subapical. The punctures on the prothorax and elytra are variable; to the naked eye the prothorax at a glance appears entirely dark.

EPISCAPHULA GUTTATIPENNIS Blackb.

This species is structurally close to *E. duplopunctata,* but is slightly more parallel-sided and with somewhat longer antennae; the type, and a specimen from Townsville, have identical pale elytral markings, which may be regarded as a subbasal fascia broken up into four spots, a postmedian fascia, also broken up into four spots, and a subapical fascia interrupted at the suture; a somewhat larger specimen, from Townsville, has smaller punctures and the postmedian fascia only broken up into two spots.

EPISCAPHULA FOVEICOLLIS Blackb.

On three specimens with the typical markings of this species (a cotype and others from Charters Towers and Normanton), there are large punctures congested into spaces on each side of the prothorax near the base and apex; on the apical spaces the surface is flattened in two specimens, and very feebly depressed on the other. A specimen, from the Stewart River, that appears to belong to the species, has no medio-lateral spots on the prothorax, the medio-basal one is distinctly bifid in front, the larger punctures are more generally distributed, although fairly dense in the angles; on the elytra the subapical spots are conjoined to form a fascia continuous from side to side.

EPISCAPHULA NIGRONOTATA sp. nov.

Plate iv, fig. 2.

Black; prothorax flavous, a large black spot on each side of the middle, the two conjoined at base; elytra flavous, a large black spot about scutellum conjoined to a larger median spot; a spot on each shoulder, one on each side about the middle, and one about the apical third; the part beyond the latter castaneo-flavous; sides of prosternum and two apical segments of abdomen flavous; parts of legs obscurely diluted with red.

Head with fairly dense and small, but sharply defined, punctures, becoming larger about base. Antennae with third joint fully twice as long as fourth. Prothorax about twice as wide as the median length, sides oblique to near apex, front angles produced and acute; with small and fairly dense punctures, a few of larger size in a shallow depression each side of base. Elytra diminishing in width from near base; with small and fairly sharply defined punctures. Coxal lines of abdomen short but fairly distinct. Length, 8–10 mm.

Hab. Queensland: Cairns district (A. M. Lea). Type, I. 11772.

A beautiful species with colours somewhat as on fresh specimens of *E. pictipennis*, but the pattern is not the same, the width across the middle is greater, the series of punctures on the elytra are smaller, etc. One of the four specimens has a small pale spot on the forehead, on another the three median spots of the elytra are combined to form an irregular fascia; on all of them the tips of the elytra are of a more reddish colour than the other pale parts. The elytral punctures are all really small, but owing to "waterlogging" there appear to be rows of quite large ones on the paler parts, but from the sides their true sizes are evident.

EPISCAPHULA ATROMACULATA sp. nov.

Plate iv, fig 3.

Black; prothorax flavous, a large round black spot on each side of middle; elytra flavous, tips pale castaneous, a large almost square spot about scutellum, a rounded one on suture before middle, and three isolated ones on each elytron: an oblique one commencing on the base near the shoulder and extending to level with middle of round sutural spot, a triangular one with its most acute angle directed to the hind end of the sutural spot, and an irregularly shaped one with an extension almost connecting it with the suture one-fifth from apex; epipleurae black; front and sides of prosternum and two apical segments of abdomen flavous; parts of legs obscurely reddish.

Head with dense, sharply defined punctures of moderate size. Third joint of antennae twice the length of fourth. Prothorax about once and one-half as wide as long, sides oblique to near apex, where the angles are produced and somewhat acute, hind angles slightly rounded off; punctures much as on head, but rather less dense, a few of larger size in a small depression each side of base. Scutellum twice as wide as long. Elytra narrow; with small but sharply defined punctures. Coxal lines of abdomen inconspicuous. Length, 10·25–11 mm.

Hab. Queensland: Kuranda (H. J. Carter from F. P. Dodd); Innisfail (National Museum from C. French). Type, I. 12004.

A very distinct species. There is a small spot on each side of the elytron near the end of the black epipleurae and invisible from above, on the type it is hardly more than a stain, but on the cotype it is larger and more distinct. On the elytra there are rows of small punctures, hardly larger than those on the interstices, but owing to "waterlogging" they appear, from directly above, to be much larger.

THALLIS VINULA Er.

T. subvinula Blackb., var.

Plate iv, fig. 4.

The form described by Blackburn as *T. subvinula* can only be regarded as a slight variety of *T. vinula*, with the elytral markings somewhat smaller than usual. Slight differences in the punctures may be seen on many specimens with markings of normal size. The typical form occurs in New South Wales, Victoria, and South Australia, as well as in Tasmania. Some of the New South Wales specimens in the Museum were taken from *Polyporus salignus*.

The species also occurs in Western Australia, where the typical form is rare and the variety *subvinula* fairly common; of twenty-four specimens from Western Australia hardly two are exactly alike in size (4·5–6·5 mm.), colour and markings; the punctures, as a rule, are decidedly stronger than on specimens from Eastern Australia; the prothorax varies from dingy-brown to deep-black, the elytra are occasionally entirely dark, but usually have four flavous spots: of these the two at the basal third vary considerably in size, and occasionally are conjoined to form an irregular fascia, or they may be so small and obscure as to be traceable with difficulty; the two postmedian ones are seldom large, and are often hardly traceable.

var. OCCIDENTALIS var. nov.

Six specimens have the upper-surface black, except for two flavous spots, of variable size, at the basal third of the elytra.

Hab. Western Australia: Swan River (J. Clark and A. M. Lea).

THALLIS BIFASCIATA Crotch.

A specimen from Sydney (the type was from Rockhampton) agrees with the description of this species.

Var.? A specimen, from Lucindale, possibly also belongs to the species, but differs from the Sydney one in being somewhat smaller and narrower, antennae somewhat shorter, with the third and fourth joints equal, the black spot about the scutellum is semicircular instead of quadrate, and the red tips of the elytra are much less pronounced.

THALLIS ERICHSONI Crotch.

A specimen from Sydney, the original locality, and three from South Australia, appear to belong to this species; two from the latter State (standing as *T. erichsoni* in the Blackburn collection) have the pronotum entirely black, except that along the middle the derm is obscurely diluted with red, but on the other from South Australia, and on the one from Sydney, the red is more conspicuous, so that the pronotum might be regarded as of a dingy red, with the sides widely infuscated. The elytral markings, however, appear to be constant.

THALLIS FEMORALIS Blackb.

This species varies considerably in size and in the intensity of its markings; it is fairly common in Tasmania, to which State it appears to be confined.

THALLIS JANTHINA Er.

This species occurs in abundance in many kinds of fungi, including *Polyporus salignus*, in New South Wales, Victoria, Tasmania, and South Australia.

THALLIS COMPTA Er.

Hab. Victoria, Tasmania, South Australia.

THALLIS DENTIPES Blackb.

Hab. New South Wales, Victoria, Tasmania, South Australia.

THALLIS VENUSTULA Blackb.

Hab. New South Wales: Forest Reefs, Dorrigo, Clarence River.

THALLIS ALTERNATA sp. nov.

Plate iv, fig. 5.

Black; three fasciae on elytra, metasternum, abdomen, and tarsi reddish, some other parts of legs and palpi obscurely reddish. Densely clothed with dark pubescence, becoming pale on the pale parts; in addition with numerous, suberect hairs.

Head with dense and (where not concealed by pubescence) sharply defined punctures. Antennae rather short, third joint slightly longer than fourth. Prothorax almost twice as wide as long, sides slightly uneven; punctures much as on head. Elytra no wider than widest part of prothorax, parallel-sided to near apex; with regular rows of fairly large punctures, the interstices with numerous small ones. Prosternum with rather coarse punctures on sides, smaller ones in middle; intercoxal process small. Coxal lines of abdomen inconspicuous. Length, 4–5 mm.

Hab. New South Wales: Ropes Creek (Dr. E. W. Ferguson), Sydney (Blackburn's collection), Windsor (A. M. Lea), Dorrigo (W. Heron); Northern Territory: Daly River (H. Wesselman), Melville Island (G. F. Hill, No. 3461). Type, I. 12008.

Allied to *E. erichsoni* and *E. australiae*, but with very different elytral markings; these, from directly above, appear to be in alternating red and black bands; of the red ones the first occupies the basal two-fifths, except for a large spot (varying from semicircular to transversely oblong) about the scutellum, and a narrow space (invisible from above) on each side, it usually has a short extension on the suture; the second is median, somewhat oblique, rather narrow, and extends neither to suture nor sides; the third is at the apical fourth, slightly longer than the second, is usually, but not always, interrupted at the suture, and terminates before the sides; the scutellum is usually obscurely diluted with red. The Daly River specimen has the middle of the apex of prothorax obscurely reddish, and the red still more obscurely traceable along the middle to base.

THALLIS SUBTUBERCULATA sp. nov.

Plate iv, fig. 6.

Black; sides of prothorax, elytra (four black spots excepted), most of abdomen, tarsi, middle coxae and palpi more or less red. Moderately densely clothed with rusty-red pubescence.

Head with sharply defined punctures of moderate size. Antennae with third joint about once and one-half the length of fourth, joints of the club not twice the width of the others. Prothorax about twice as wide as its shortest length, sides obtusely serrated, apex truncated in middle and notched near each side, the commencement of each notch marked by a slight tubercular swelling; punctures more irregular than on head, and leaving a shining median line. Elytra parallel-sided to near apex; with regular rows of fairly large punctures, becoming smaller posteriorly, the interstices each with a row of small ones. Intercoxal process of prosternum rather wide, posterior end obtuse. Coxal lines of abdomen traceable to beyond middle of first segment. Length, 5·5–6·5 mm.

Hab. Victoria: Warburton (H. J. Carter and J. A. Kershaw), Warragul (J. C. Goudie). Type, I. 12007.

A hairy species allied to *T. insueta*, *T. erichsoni*, *T. australiae*, and *T. alternata*, but elytra with four black spots, and the prothorax with a feeble tubercle on each side of middle of apex; the spots on the elytra consist of a semicircular to transversely-oblong one about the scutellum, a small one on the suture near apex, and a larger, rounded, completely isolated one, on the middle of each elytron; on two of the specimens the black portion of the pronotum is entire, but on two others the middle of its apical half is red.

THALLIS HOPLOSTETHA sp. nov.

Plate iv, fig. 7.

♂ Black, two elytral vittae, abdomen, legs, antennae and palpi more or less flavous, rest of under-surface more or less obscurely diluted with red. Rather densely clothed with pale, rusty pubescence.

Head strongly convex and with a stridulating file on forehead; with fairly dense but irregular punctures elsewhere. Antennae with third joint slightly larger than the adjacent ones; club rather small. Prothorax scarcely one-fourth wider than median length, apex widely produced and overhanging head, notched near each side, sides gently and evenly rounded, a narrowly impressed line almost on each margin; with dense punctures, but leaving a shining median line on basal half; produced portion of apex densely granulate. Elytra scarcely wider than prothorax, parallel-sided to near apex; punctate-striate, striae distinct throughout, interstices with rather coarse punctures, becoming smaller and denser posteriorly. Prosternum with a large hairy cavity in middle of apex, an acute process overhanging the cavity; intercoxal process not very wide, its hind end obtuse. Abdomen with coxal lines distinct to near apex of basal segment. Femora stout, grooved along under-surface, the ridge on each side of the groove finely serrated; tibiae widely dilated to apex. Length, 8–9 mm.

♀ Differs in having the head smaller, forehead not separately convex, without a stridulating file, prothorax shorter, the apex less overhanging the head, with asperate punctures instead of granules, the prosternum unarmed, and without a medial-apical cavity.

Hab. New South Wales: Galston (D. Dumbrell), Sydney (A. M. Lea). Type, I. 12010.

The conspicuously armed prosternum, stridulating file on head, and longitudinal markings of elytra readily distinguish this species from all other named Australian Erotylidae. In the female the prosternum is unarmed, and its hind parts are exactly as in *T. insueta.* The file consists of about fifteen transverse ridges, becoming smaller in front; they are often almost or quite concealed by the overlapping prothorax. On several specimens, especially females, the darker parts are more or less chocolate-brown; each elytral vitta commences on the shoulder, is rather suddenly inflated inwards so as to occupy about six interstices, and is then narrowed to occupy about two or three to near the apex, which it does not reach.

THALLIS FERRUGINEA sp. nov.

Ferruginous, legs of a somewhat brighter colour. Densely clothed with short, rusty or ashen pubescence, mixed with longer hairs.

Head with crowded punctures partially concealed by clothing. Antennae short, third joint slightly longer than the adjacent ones; club rather small. Prothorax as long as wide, apex truncated almost throughout, each marginal line invisible from above except at ends; punctures as on head. Elytra slightly more than twice the length of prothorax and scarcely wider, sides feebly rounded; with regular rows of punctures, in shallow striae, interstices with dense and small punctures. Prosternum with intercoxal process rather narrow. Abdomen with coxal lines distinct to about one-third from apex of basal segment. Legs rather short and stout; middle and hind tibiae denticulate on lower-surface. Length, 5 mm.

Hab. Western Australia: Cue (H. W. Brown). Type, I. 11776.

A dingy species, nearer *T. basipennis* than any other named one of the genus, but considerably narrower, with different elytral clothing.

THALLIS SERRATIPES sp. nov.

Of a dingy reddish-brown or castaneous: most of head black, elytra flavous, with black markings.

Head with numerous, but not crowded, sharply defined punctures. Antennae moderately long, third joint about one-fourth longer than the adjacent ones, ninth and tenth each twice as wide as long, eleventh longer than wide. Apical joint of each palpus subconical. Prothorax about once and one-half as wide as long, apex truncated across middle and obtusely notched near each side, sides feebly rounded, lateral and basal gutters distinct; punctures much as on head. Elytra distinctly wider than prothorax, parallel-sided to near apex; with regular rows of rather large punctures, in shallow striae, interstices almost or quite impunctate. Middle portion of prosternum with dense and more or less confluent punctures, the sides with sparse and larger ones; intercoxal process narrow, obtusely rounded posteriorly. Coxal lines of abdomen scarcely traceable beyond coxae. Legs long; front femora narrowly ridged on under-surface, the ridge finely serrated and terminating in a sharp but rather small tooth. Length, 6·25–8 mm.

Hab. New South Wales: Macquarie Pass, on *Polyporus salignus* (Dr. J. B. Cleland); Victoria: Alps (National Museum from C. French). Type, I. 11775.

An elongate species, with longer antennae and legs than usual. The upper surface is glabrous, except for scarcely visible remnants of pubescence on the apical sides of elytra. On several specimens the antennae are almost black, and several have the sides of prothorax paler than the disc. On the elytra the black markings consist of a large blotch about the scutellum, a spot on each shoulder, a wide median irregular fascia (usually narrowly interrupted at the suture), and the apical third, the anterior portion of the latter appearing as three triangles, of which the sutural one is the widest; on several specimens parts of the dark markings are obscurely diluted with red; on one they are all connected: the median fascia, for the width of two interstices on each side of the suture, with the basal blotch, and narrowly on each side of, but not actually on, the suture with the apical marking; and also narrowly on the margins with the humeral spots; on most specimens, however, all the flavous parts of the elytra are more or less narrowly connected. Owing to "waterlogging" the seriate punctures on the pale parts of the elytra, from directly above, appear to be much larger than they really are, but when viewed obliquely they are seen to be no larger than the adjacent ones on the dark parts.

THALLIS METASTERNALIS sp. nov.

Plate iv, fig. 8.

Dull reddish-brown; most of head and part of antennae blackish; prothorax blackish, an obscure reddish vitta on each side; elytra black, with flavous-red markings. a fascia at basal third, narrowly connected along middle of each elytron with the base, so as to isolate a large blotch about the scutellum, an irregular post-median fascia, not quite touching suture or sides, and a large spot on each side of apex. Upper-surface with extremely short and sparse (scarcely visible) pubescence.

Head with sharply defined and numerous but not crowded punctures. Antennae with third joint slightly longer than adjacent ones, ninth and tenth each almost twice as wide as long, eleventh slightly longer than wide. Apical joint of each palpus subconical. Prothorax near apex almost twice as wide as the median length, an obtuse notch near each side of apex, sides decreasing in width from near apex to base, and very feebly irregular, lateral and basal gutters well defined; punctures slightly larger than on head. Elytra parallel-sided to near apex; with regular rows of fairly large punctures, becoming smaller posteriorly; interstices with sparse and minute punctures. Intercoxal process of prosternum not very wide, obtusely pointed at end. Metasternum with large and sparse punctures on sides. Abdomen with coxal lines traceable to apex of basal segment. Front femora feebly ridged along under-surface, the ridge terminating in a feeble tooth. Length, 5 mm.

Hab. New South Wales: Sydney (Dr. E. W. Ferguson). Type (unique), I. 12005.

About the size of *T. macleayi*, and with somewhat similar markings, except that each shoulder is black, but the lateral gutters of the prothorax are much nearer the margins. The pubescence is almost invisible from above, and even from the sides could be easily overlooked.

THALLIS TRICOLOR sp. nov.

Plate iv, fig. 9.

Black; an orange-yellow spot on forehead, prothorax orange-yellow, a large subovate spot on each side of middle, touching the base at its narrower end; elytra flavous with black markings, the tips orange-yellow; prosternum (except for some infuscations about coxae) and two apical segments orange-yellow, the three basal segments more or less infuscated or black. Upper-surface glabrous.

Head with not very dense and rather small but sharply defined punctures, becoming dense on clypeus. Antennae with third joint about once and one-half the length of the adjacent ones. ninth and tenth each at apex twice as wide as the median length, eleventh about as long as wide. Apical joint of each palpus subconical. Prothorax not twice as wide as long, widest close to apex, obtusely notched on each side of apex, lateral striae extremely close to margins; punctures small and not very dense, but mostly sharply defined. Elytra distinctly wider than prothorax, parallel-sided to near apex; with regular rows of punctures of moderate size, becoming small posteriorly; interstices with scarcely visible punctures. Prosternum in parts impunctate; intercoxal process rather narrow, produced to an obtuse point posteriorly. Coxal lines of abdomen not distinct beyond middle of the basal segment. Front femora ridged on under-surface and dentate in male, simple in female. Length, 6–7 mm.

Hab. New South Wales: Dorrigo (H. J. Carter, W. Heron, and R. J. Tillyard). Type, I. 11773.

An elongate, beautiful species, with the three colours of *Episcaphula pictipennis* and *E. nigronotata*, but with the palpi and prosternum of a *Thallis*. On several specimens the legs (except for the claws), antennae, and scutellum are entirely deep black, but on others they are more or less reddish in parts; the black parts of the elytra are the margins and epipleurae (except about apex), a large spot about scutellum, and a spot on each shoulder, a submedian fascia (usually narrowly interrupted at the suture), and three spots (sometimes connected) at the apical third; of these the median spot is larger than the others, and has a fairly wide sutural extension almost to the apex. On several specimens parts of the head are obliquely strigose, or with punctures exhibiting a tendency to become confluent.

HOPLEPISCAPHA gen. nov.

Head subtriangular. Eyes small, lateral, coarsely faceted. Palpi short, apical joint conical. Antennae elongate, three apical joints forming a loose club. Prothorax rather long, sides and base finely margined. Scutellum widely transverse. Elytra elongate, parallel-sided to near apex. Prosternum evenly convex in front, process rather wide between coxae and dilated at its end; coxal cavities closed. Metasternum elongate, episterna narrow, epimera almost entirely concealed. Legs long; front femora of male dentate; tarsi linear, three basal joints setose, fourth appearing as a small basal portion of claw joint, this almost as long as the rest combined.

The elongate antennae, with club loosely articulated and hardly more than continuous with the preceding joints, is at variance with all other described Australian Erotylidae, and with all those figured by Kuhnt (²); but the tarsi are much as figured for *Coptengis sheppardi*.(³) When the abdomen has been wetted the coxal lines are faintly traceable almost to the apex of the basal segment, but they disappear when dry. For the present the genus may be referred to the vicinity of *Episcaphula*.

HOPLEPISCAPHA LONGICORNIS sp. nov.

Fig. 337.

♂ Castaneo-flavous, legs flavous, knees somewhat infuscated; basal half of head, a large spot on each side of prothorax, and most of elytra, black or blackish. Upper-surface glabrous, parts of under-surface sparsely clothed.

Head with dense and sharply defined, but not very large punctures, a shallow depression at each side of clypeal suture. Antennae passing middle coxae, first joint stout, third almost twice as long as second, and about one-third longer than fourth, the others to eighth gradually decreasing in length, ninth and tenth slightly wider than eighth, and each shorter than eleventh. Prothorax slightly longer than wide, each side of apex obtusely notched behind the eye, base and sides narrowly margined; punctures much as on head, except that they are not quite as dense. Scutellum with distinct punctures. Elytra no wider than widest part of prothorax; with rows of rather large punctures, becoming smaller posteriorly; interstices with sparse and small punctures. Prosternum with dense and rather small punctures. more or less transversely confluent, the flanks with larger, round, non-confluent ones. Metasternum and abdomen with small punctures, becoming larger on sides. Front femora ridged along middle, the ridge

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(²) Kuhnt, in Wytsman's Genera Insectorum, Fasc. 88.

(³) *L.c.*, pl. iv, fig. 7c.

ending in a strong tooth; front tibiae more strongly arched at base, and stouter at apex than the others. Length, 6–6·5 mm.

♀ Differs in the head being smaller, with shorter antennae, prothorax shorter, somewhat transverse, and slightly narrower than elytra, front legs with unarmed femora and tibiae thinner.

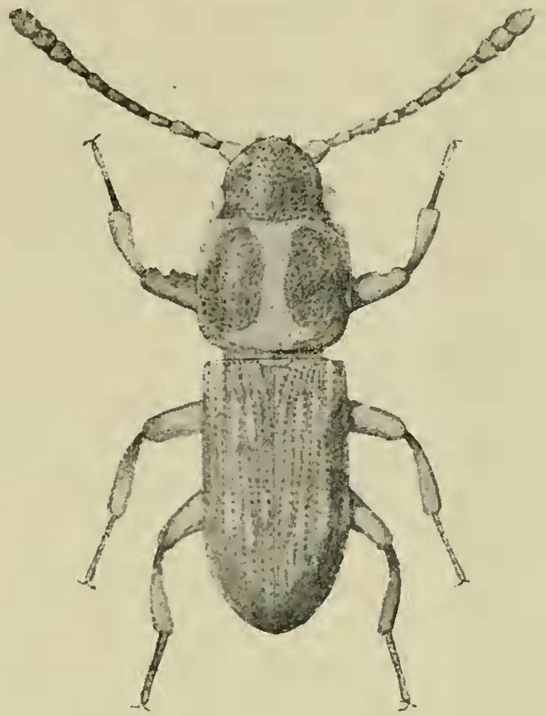

Fig. 337. *Hoplepiscapha longicornis.* Lea.

Hab. Western Australia: Geraldton (J. Clark), Mount Barker (A. M. Lea). Type, I. 12014.

The spot on each side of the prothorax is elliptic in shape and extends almost the length of the segment; the pale parts of the elytra are the base and apex narrowly; suture, shoulders, a series of from four to eight narrow spots at the basal fourth, the lateral ones sometimes connected with the humeral ones, and another series, of from six to twelve, beyond the middle. On one male the dark parts of the elytra are hardly more than castaneous, and the dark parts of the prothorax and head not much darker.

TRITOMA AUSTRALIAE sp. nov.

Blackish or blackish-brown, elytra coppery or coppery-green, or blue; head, palpi, six basal joints of antennae, prosternum, abdomen and legs flavous, or castaneo-flavous, apical and lateral margins of prothorax and sides of metasternum more or less obscurely diluted with red. Under-surface and legs finely pubescent, upper-surface glabrous.

Head wide and almost flat; with fairly dense and sharply defined, but rather small punctures, becoming sparser towards base. Eyes lateral and rather small. Antennae scarcely passing base of prothorax, third joint about as long as first and second combined, or fourth to sixth combined, ninth and tenth each about twice as wide as long, apex incurved to middle, eleventh slightly longer than tenth, its apex rounded. Prothorax at base about thrice as wide as the median length, base bisinuate, much wider than apex, front angles produced and acute, hind ones rectangular, sides narrowly margined; punctures small and rather sparse. Scutellum wide, almost impunctate. Elytra closely applied to and with outlines continuous with those of prothorax, widest at about basal fourth; with regular rows of rather small but sharply defined punctures; interstices wide, not separately convex, with minute and sparse punctures. Intercoxal process of prosternum subconical in front, wide and almost truncate at base. Abdomen with coxal lines distinct and almost enclosing a plate on each side. Legs rather short and stout; femora feebly grooved along under-surface. Length, 3·25–5 mm.

Hab. Northern Queensland (Blackburn's collection), Cooktown (H. J. Carter from H. W. Cox), Babinda (Dr. J. F. Illingworth), Kuranda (F. P. Dodd). Type, I. 11786.

Judged by colour alone the antennae would appear to have a five-jointed club, as the five apical joints are black, but the seventh is much the same shape as the sixth, although a trifle wider, the eighth is much smaller than the ninth, but as it is much wider than long, with its outer angles triangular, it might fairly be regarded as belonging to the club, and the latter in consequence to be four-jointed. Chapuis notes the club of *Tritoma* as three-jointed, and in English specimens of *T. bipustulata* it is conspicuously so, but as, in most details, including the finely faceted eyes, the present species agrees with the characters of that genus, it has been referred to it. It is a briefly elliptic, moderately convex species, and of six specimens no two have the elytra of the same shade of colour, although metallic in all; the specimen, from the Blackburn collection, is slightly narrower than the others, its pronotum is entirely dark, but with a slight greenish gloss, the elytra are purple, and the legs (except the tarsi, knees and trochanters) are blackish.

EUXESTUS TASMANIAE Lea (formerly TRITOMIDEA).

Numerous specimens from Victoria (Dividing Range and Mount Hotham), and New South Wales (Glen Innes), appear to belong to this species, but differ from the types in being slightly smaller and with the head and prothorax almost entirely black or blackish.

Mr. Arrow has stated that *Tritomidea* is a synonym of *Euxestus*.(4)

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(4) Arrow, Ann. Mag. Nat. Hist., November, 1917.

EUXESTUS MEDIONIGER sp. nov.

Black; head, a fascia at base of elytra, their apical third and under-surface more or less castaneous; elytral epipleurae, legs, antennae, and palpi paler.

Head with minute punctures, a small fovea on each side of clypeus. Antennae short, basal joint large; club slightly wider than long. Prothorax at base almost thrice as wide as the median length, apex almost truncate, sides very finely margined; punctures sparse and inconspicuous. Elytra with outlines continuous with those of prothorax, widest at about basal fourth; punctures fairly distinct near base, sparse and inconspicuous elsewhere. Abdomen with coxal lines enclosing a distinct plate on each side. Length, 2·25 mm.

Hab. New South Wales: Dorrigo (W. Heron); Western Australia: Manjemup (Dr. E. W. Ferguson). Type, I. 11783.

This species, of which there are five specimens under examination, appears almost to connect the described variety of *E. ventralis* with *T. bivulneratus*; from the former it is distinguished by the more conspicuous markings at base of elytra, much finer punctures and almost truncated apex of prothorax, and from the latter by its somewhat narrower and less convex form, basal markings somewhat larger, not blood-red, and almost touching the suture, and apex of elytra conspicuously reddish.

DIPHYLLUS OBSCURONOTATUS sp. nov.

Black, elytra with two feebly defined spots before the middle; legs, antennae and palpi obscurely reddish. Densely clothed with short, suberect pubescence.

Head with small and dense but sharply defined punctures. Antennae just passing base of prothorax; club two-jointed. Prothorax more than thrice as wide as long, a deep stria near each side, and a much less distinct one near it. Elytra with regular rows of rather large punctures, becoming smaller posteriorly; interstices without distinct punctures. Length, 2 mm.

Hab. Queensland: Cairns district (A. M. Lea). Type (unique), I. 11789.

Structurally close to *D. flavonotatus*, but elytral markings consisting of two vague spots that could be easily overlooked, each is narrow and extends across three interstices; it is shorter and darker than the British *D. lunatus*, but with markings approaching those of that species.

DIPLOCOELUS PILINOTATUS sp. nov.

Black, legs, antennae and palpi obscurely reddish. Densely clothed with golden-grey pubescence, in places blackish; in addition with lines of short setae.

Head with dense, partially concealed punctures. Antennae short; club three-jointed, apical joint slightly longer and distinctly paler than the preceding ones. Prothorax about twice as wide as the median length, sides gently rounded, front angles feebly produced; striae not sharply defined; punctures much as on head, but more distinct on sides. Elytral parallel-sided to near apex; with regular rows of distinct punctures, becoming smaller towards suture; interstices with minute punctures. Length, 2·25 mm.

Hab. Queensland: Cairns district (A. M. Lea). Type (unique), I. 11790.

On the elytra there appear to be three series of black markings, owing to the pubescence there being similar to the derm on which it rests: a spot on each shoulder, a median fascia, and a subapical interrupted one; on the prothorax there are also obscure markings; but it is probable that on rubbed specimens the markings would disappear or become inconspicuous. Seen from the front, the prothorax appears to have ten longitudinal lines of pubescence, but these decrease in number when viewed from behind.

DIPLOCOELUS DECEMLINEATUS sp. nov.

Dull reddish-brown or castaneous, legs, antennae and palpi somewhat paler. Rather densely clothed with depressed, greyish pubescence, denser and paler on under-surface than on upper; the latter, in addition, with fairly dense, suberect setae

Head with dense, partially concealed punctures. Antennae short; club three-jointed. Prothorax almost thrice as wide as long, sides gently rounded, front angles scarcely produced; with ten slight longitudinal elevations, alternating with slight depressions; punctures much as on head. Elytra at base the width of prothorax, slightly wider to about the middle, with rows of moderately large punctures, interstices with rather dense and small ones. Length, 3–3·5 mm.

Hab. South Australia: Lucindale (B. A. Feuerheerdt), Port Lincoln (A. M. Lea); Tasmania: Ulverstone, Hobart (A. M. Lea). Type, I. 12016.

Excluding the margins, the prothorax appears to have ten slightly elevated lines, marking off depressions, including a fairly distinct median one, the depressions on each side of the latter interrupted in the middle.

DIPLOCOELUS PLATYSOMUS sp. nov.

Blackish or blackish-brown, elytra somewhat paler but very obscure, legs, antennae and palpi castaneous. Moderately clothed with short, depressed, pale pubescence.

Head wide; with dense and small but rather sharply defined punctures; a shallow depression towards each side of clypeal suture. Eyes small, lateral, coarsely faceted. Antennae short, club two-jointed. Prothorax not twice as wide as long, widest and straight at apex, hind angles rounded off; with small and fairly dense punctures, becoming crowded on sides. Elytra parallel-sided to near apex; with rows of fairly large punctures, becoming smaller towards suture and posteriorly; interstices with small punctures. Length, 2 mm.

Hab. Lord Howe Island (A. M. Lea). Type, I. 12023.

The impressed lines towards each side of the prothorax that, in addition to the marginal ones, are so conspicuous on most species of *Diplocoelus*, are represented on the present species by a submarginal one that can be seen, from certain directions, near the apex only; the transverse line near the base of the head that (when not concealed by the prothorax) is also usually very distinct, is represented by a shallow indistinct one; nevertheless the species appears to be a true *Diplocoelus*, and to be allied to *D. angustulus* and *D. apicicollis*, but it is shorter, much wider, flatter, and darker, with smaller punctures, etc. Of seven specimens obtained on the island only one has the prothorax no darker than the elytra.

FAMILY ENDOMYCHIDAE.

STENOTARSUS QUINARIUS sp. nov.

Reddish-flavous, an irregular mark on prothorax, scutellum, four spots on elytra and antennae (basal joints excepted) black. Rather densely clothed with pale, semiupright hair.

Head with minute punctures. Antennae rather short, club stout. Prothorax widely transverse, sides rather strongly rounded, apex much narrower than base and semicircularly emarginate, sublateral striae deep, dilated at base; punctures small but rather sharply defined. Elytra with sides gently rounded; with regular series of fairly large punctures, becoming smaller posteriorly; interstices with small punctures. Length, 4 mm.

Hab. Queensland: Mount Tambourine (A. M. Lea). Type (unique), I. 11796

Structurally close to *S. arithmeticus* and *S. quinquenotatus*, but with very different markings; the four spots on the elytra are larger than on the latter species, the outer ones are much in the same positions, but the inner ones are much nearer the base; on the prothorax the black mark covers about the basal third, and has a subtriangular extension almost to the apex.

STENOTARSUS BIMACULIPENNIS sp. nov.

Red, three marks on prothorax, two on elytra, scutellum and part of antennae black, coxae and adjacent parts more or less infuscated. Rather densely clothed with pale, semiupright hair.

Head with minute punctures; with two small but distinct impressions between eyes. Prothorax with sides strongly rounded, apex much narrower than base and semicircularly emarginate, sublateral striae deep, becoming foveate at base; sides with distinct punctures, elsewhere impunctate. Elytra gently rounded, widest at about basal third; with rows of rather large punctures, becoming smaller towards suture and posteriorly, interstices with small but distinct punctures. Length, 3 mm.

Hab. Queensland: Mount Tambourine (A. M. Lea). Type (unique), I. 11795.

Structurally close to *S. quinquenotatus*, but slightly narrower and more convex, prothorax more narrowed in front and elytra behind, legs red and elytra bimaculate. The markings on the prothorax are conjoined at base, and consist of a large equilateral triangle, and a much smaller mark on each side, about half of the surface being dark; the mark on each elytron is of irregular shape, wider than long, and extends across about five interstices at the basal third, and distant about two from the suture, four or five of the apical joints of each antenna are blackish, but the apical half of the eleventh joint is somewhat reddish.

STENOTARSUS PALLIDIPENNIS sp. nov.

Black; elytra, metasternum and abdomen flavous, scutellum and tarsi somewhat darker. Rather densely clothed with pale, semierect pubescence.

Head with numerous small punctures. Antennae rather long; club stout. Prothorax with front angles rounded and somewhat produced, sides elsewhere parallel, sublateral striae deep, becoming foveate at base; punctures sparse and small, but becoming more distinct in lateral gutters. Elytra long, almost parallel-sided to near apex; with rows of punctures of moderate size, becoming smaller towards suture and posteriorly, interstices with minute punctures. Length, 2·75 mm.

Hab. Queensland: Cairns district (A. M. Lea). Type (unique), I. 11801.

Structurally close to *S. parallelus*; but prothorax entirely black and elytra entirely pale.

DAULIS CIMICOIDES Er.

In the diagnosis of *Daulis* the legs were noted as "basi vix distantes" and abdomen as composed of "segmentis 6"; these parts not being again referred to under the species.

Several specimens before me, from Tasmania and New South Wales, probably belong to the species; their hind coxae are widely separated at the base, but the middle ones are much closer together and the front ones almost touch; the abdomen at first appears to be composed of five segments only, but on one specimen a minute sixth one (apparently retractile) may be seen. The elytra have numerous small shining spots, that, from some directions, appear to be in rows, and there are some scattered, irregular, infuscated spots.

DAULOTYPUS gen. nov.

Head moderately large. Eyes large, lateral, and coarsely faceted. Antennae elongate, eleven-jointed, the three apical joints forming a club. Palpi rather long, apical joint of maxillary pair subconical, of labial pair securiform. Prothorax widely transverse, a short deep groove near each side on basal half. Elytra much wider than prothorax. Legs rather long; hind coxae moderately separated, middle pair rather close together, front pair separated by a narrow keel and with their cavities widely open posteriorly; femora unarmed; two basal joints of tarsi rather wide, the second bilobed, third minute and scarcely distinguishable from base of the claw joint. Wings present.

Close to *Daulis*, but palpi longer and apical joint of labial pair of different shape; the prosternum is also acutely keeled between the coxae. On specimens, which are probably males, the abdomen appears to be composed of six segments, of these the first is not much longer than the second, the second-fourth are subequal in length, the fifth is fairly long at the sides but strongly incurved to middle, the sixth is traceable at the sides but not at the middle; beyond it there is a process that may be an extrusible segment. On the presumed females the basal segment is larger, the fifth is rounded in the middle of the apex, and the sixth (unless it is an extrusible process) is rounded at the end and depressed in the middle.

DAULOTYPUS PICTICORNIS sp. nov.

♂ Reddish-flavous, prothorax and parts of head, antennae and legs black or infuscated. Moderately clothed with short, subdepressed, pale pubescence; in addition with numerous erect setae, or short hairs.

Head somewhat irregularly impressed and with irregularly distributed punctures. Clypeus rather large, on a lower plane than interocular space. Labrum large, wider than clypeus, apex bilobed; with dense punctures. Antennae thin, passing metasternum, first joint rather long, third slightly longer than fourth, distinctly longer than second and slightly shorter than first, ninth and tenth slightly longer than the preceding ones and dilated to their tips, eleventh slightly longer than tenth and somewhat pointed. Prothorax about twice as wide as long, sides narrowly margined, widest near apex, then rounded to apex, incurved towards and then parallel to base; a deep, slightly oblique impression commencing near each hind angle and terminating (but shallower) near apex, obliquely traversed by a shallower impression; a narrow deep impression at base; punctures dense but not very large on sides, smaller and sparser in middle. Scutellum briefly triangular, almost impunctate. Elytra much wider than prothorax at base, widest about middle, shoulders strongly rounded, sides rather widely margined except at base and apex; with close-set but somewhat irregular rows of rather long punctures, becoming crowded and smaller posteriorly. Under-surface with irregularly distributed punctures. Femora rather stout, hind ones not passing fourth abdominal segment; tibiae rather long, hind pair incurved and dilated at middle. Length, 5–5·5 mm.

♀ Differs in being somewhat wider and more convex, prothorax and legs entirely pale, hind tibiae not dilated or incurved in middle, and in the abdomen.

Hab. Queensland: Cairns district (Blackburn's collection and A. M. Lea), South Johnstone River (H. W. Brown). Type, I. 5234.

On the male the prothorax is black or almost so, the head is more or less deeply infuscated, the antennae have five or six of the basal joints partly or entirely pale, the following joints blackish, the apical half of the eleventh joint, however, is conspicuously paler than its basal half; the apical half of the femora and parts of the tibiae are also more or less deeply infuscated; on the female the only dark parts are four or five joints of the antennae (the tips being pale as in the male). The hind tibiae of the male have a narrow impression on the upper-surface, marking off the dilated inner portion. The joints of the club are compressed so that, although considerably wider than the preceding joints, from some directions they appear to be of the same width. The X-shaped impression on each side of the prothorax is distinct from most directions, especially on the male, but its parts are of uneven depths. On some parts of the elytra the punctures appear to be slightly geminate in arrangement, but posteriorly their systematic arrangement disappears.

EROTENDOMYCHUS gen. nov.

Head small; clypeus narrow, labrum small. Eyes small, lateral, prominent, coarsely faceted. Antennae with three-jointed club. Palpi small, apical joint conical. Prothorax widely transverse, sides finely margined, without deeply impressed sublateral or basal lines. Scutellum small. Elytra rather long, closely applied to prothorax; epipleurae narrow, and disappearing beyond middle. Mesosternum with intercoxal process subconical, its tip rounded and produced to between bases of front coxae. Metasternum elongate; side pieces narrow. Abdomen with basal segment slightly longer than three following ones combined, these subequal, fifth slightly shorter than two preceding ones combined. Legs moderately long, front coxae almost touching, their cavities open behind, middle coxae moderately the hind ones widely separated; femora unarmed; tibiae rather thin, but somewhat dilated to tips; tarsi four-jointed, third joint small, claws simple. Wings atrophied.

Apparently an aberrant genus of the Endomychidae (Leconte records *Alexia* as being without the characteristic sculpture of the pronotum of that family); at first glance the species described below appears to be a small erotylid, but the tarsi are truly tetramerous, the third joint (although larger than in most Australian genera of the Endomychidae) being much smaller than the second, not hairy and slightly produced under the base of the claw-joint. The prosternum is ridged along the middle, and, when closely applied to the mesosternum, the ridge appears to touch the intercoxal process of the latter; it really, however, does not extend to between the middle of the front coxae. Closely embracing each hind coxa there is, on the abdomen, a narrowly impressed line, but the space enclosed could hardly be regarded as an abdominal plate, as in many of the Erotylidae. Some specimens have thicker and longer legs and antennae than others, and these are probably males, but there are apparently no distinct external indications of sex. A second species, from Mount Tambourine, is in the Museum, but as it is represented by an entirely pale (probably immature) specimen, it has not been described.

EROTENDOMYCHUS BIMACULATUS sp. nov.

Plate iv, fig. 10.

Red or reddish-castaneous, most of pronotum and two large spots on elytra black. Upper-surface glabrous, under-surface, legs and antennae minutely pubescent.

Head with minute punctures; clypeus convex in middle, depressed on each side. Antennae extending to about middle of metasternum, first joint moderately large, second-eighth about as long as wide, or slightly transverse, ninth larger and more transverse, tenth still larger, eleventh slightly longer and wider than tenth. Prothorax almost twice as wide as long, sides gently incurved near base, hind angles almost rectangular, the front ones rounded, apex gently incurved to middle, base bisinuate; with rather sparse and small but sharply defined punctures, becoming more numerous on sides and parts of base. Elytra at base slightly wider than prothorax, widest at about basal third, thence evenly rounded to apex; with rows of rather small punctures. Under-surface with sparse and minute punctures. Length, 2·75–3 mm.

Hab. Victoria: Dividing Range (Blackburn's collection); New South Wales: Mittagong (A. M. Lea). Type, I. 11802.

A rather elongate-elliptic, flat species. On most of the specimens the pronotum is entirely black, or with the front angles at most obscurely diluted with red, on others the front angles are distinctly reddish, on one specimen the red extends across the whole apex (and its elytral spots are deeply infuscated instead of black); the elytral spots are median and are usually round, each occupies about two-thirds of the space between the suture and side; but, on the only specimen from Mittagong, the spots are dilated so as to form a fascia occupying rather more than the median third (except that the suture is obscurely diluted with red). On some specimens the base of the prothorax has a small vague depression on each side, but on most of them the base is quite flat. The elytral punctures are small and rather distant in the rows, without the least evidence of striation (except close to the suture posteriorly); from most directions they appear to be sparsely scattered at random.

GEOENDOMYCHUS gen. nov.

Head rather wide, clypeal sutures distinct. Eyes small, lateral, prominent, coarsely faceted. Antennae with nine joints, three forming a club. Apical joint of maxillary palpi rather large and subconical; of labial palpi rather large and dilated to apex, but scarcely securiform. Prothorax widely transverse, with a rather deep curved impression towards each side. Scutellum small. Elytra short, sides strongly rounded and subcontinuous with those of prothorax: epipleurae wide, almost flat, and continuous to apex. Prosternum with a rather wide, flat, bistriated intercoxal process, its posterior end truncated. Metasternum moderately long, episterna narrow. Abdomen apparently composed of six segments, but the apical one small and extrusible. Legs not very long, front coxae subglobular, their cavities widely open posteriorly, middle and hind coxae widely separated; femora unarmed; tibiae rather thin; tarsi thin, apparently three-jointed; claws simple.

At first glance *G. pubescens* looks like a short *Scymnus* or *Rhizobius* of the Coccinellidae, and under a high power I cannot make out the tarsi to be anything but three-jointed; but the nine-jointed antennae, nonsecuriform palpi, and sculpture of prothorax exclude it from that family. The wings are long, thin and hardly more than filaments, not fringed (as in the Corylophidae), and certainly useless for flight. The mandibles are bifid. Type of genus: *G. pubescens*.

GEOENDOMYCHUS PUBESCENS sp. nov.

Castaneous, elytral epipleurae, legs, antennae and palpi somewhat paler. Moderately clothed with short, pale, subdepressed pubescence.

Head feebly convex, with sparse punctures. Antennae moderately long, first joint stout, its base partly concealed, second and third elongate, second stouter than third, fourth short, fifth and sixth still shorter, seventh subglobose, about twice as long and twice as wide as sixth, eighth scarcely longer but more transverse, ninth briefly obpyriform, slightly wider and distinctly longer than eighth. Prothorax at base fully four times as wide as the median length, sides strongly rounded and finely margined, apex deeply emarginate and about half the width of base, base widely bisinuate and feebly margined, a deep, narrow, curved stria near each side, but terminated before middle; punctures inconspicuous. Elytra scarcely longer than greatest width (at about basal fourth), strongly and evenly convex, sides finely margined; with dense and small but in places fairly distinct punctures; epipleurae faintly wrinkled, feebly diminishing in width posteriorly. Length, 1·5–1·75 mm.

Hab. Lord Howe Island (A. M. Lea). Type, I. 11803.

A short strongly convex species of which twenty-two specimens were obtained by sieving fallen leaves. The base of the prothorax is very narrowly infuscated; three specimens are entirely flavous, probably from immaturity; another has the medio-basal portion of the elytra slightly stained with piceous. The pubescence appears to be easily abraded.

GEOENDOMYCHUS GLABER sp. nov.

Castaneo-flavous, appendages slightly paler. Prothorax and elytra glabrous, elsewhere feebly pubescent.

Head gently convex, a feeble depression near each eye; punctures inconspicuous. Antennae nine-jointed, two basal joints rather large; club three-jointed. Prothorax at base fully four times as wide as the median length, sides strongly rounded and very finely margined; apex rather deeply emarginate, a narrow deep line near each side, with which it is parallel, traceable from base to apex; impunctate. Elytra with outlines subcontinuous with those of prothorax, sides strongly rounded and finely margined; with minute punctures. Intercoxal process of prosternum dilated to and truncated at posterior end, a fine stria on each side. Length, 1·3–1·5 mm.

Hab. Queensland: Hamilton (C. J. Wild); New South Wales: Richmond River, from a nest of termites (A. M. Lea). Type, I. 12029.

The outlines, under-parts, legs, antennae and palpi are much as in the preceding species, from which it may be readily distinguished by its glabrous upper-surface, and longer sublateral striae of prothorax.

ENCYMON CLAVICORNIS Blackb.

Mr. Arrow(5) states that this species is an *Encymon;* it was originally referred to *Mycella,* but subsequently made the type of the new genus *Cranterophorus.* The type was described as blackish-aeneous, with the prothorax and femora red, such as is common with specimens from New South Wales and Queensland; but occasionally the elytra are purple. A specimen, from Aru, has purple elytra, but otherwise agrees with the typical form. Many specimens from New Guinea (St. Joseph's River and the Madang district) have the legs uniformly black and the elytra violet.

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(5) Arrow, Trans. Ent. Soc. Lond., 1920, p. 3.

MYCELLA LINEELA Chp.

The markings of this species consist of a long pale vitta on each elytron, conjoined or not to a small outer spot near the base, occasionally the latter being absent.

PERIPTYCTUS RUSSULUS Blackb.

This species occurs in Tasmania (Wilmot, Ulverstone, Mole Creek, and Hobart) and New South Wales (Forest Reefs), as well as in Victoria.

var. BILINEATUS var. nov.

Ten specimens, from Forest Reefs, differ from the common form in having a distinct infuscated line towards each side of the prothorax, instead of the discal portion rather lightly infuscated, but as they were obtained with specimens of the typical form, and are structurally the same, I cannot regard them as representing more than a variety.

FAMILY CORYLOPHIDAE.

APHANOCEPHALUS PUNCTULATUS Blackb. (formerly ELEOTHREPTUS).

On the typical form of this species the prothorax, except that the sides are pale, and elytra are of a very dark brown; but on some specimens those parts are black or almost so; others have the whole upper-surface of a dingy brown. It was referred to the Endomychidae by Blackburn, who proposed a new genus for it, but Arrow,(6) from examination of the type, referred it to *Aphanocephalus* (Corylophidae). It occurs in Victoria (Alps, Geelong, and Forrest), as well as in South Australia.

APHANOCEPHALUS POROPTERUS sp. nov.

Blackish, sides of prothorax and most of under-surface obscurely paler, legs still paler; elytra with flavous markings. Moderately clothed with short, ashen pubescence.

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(6) Arrow, Trans. Ent. Soc. Lond., 1920, p. 3.

Head with small, dense punctures on basal half. Antennae with first and ninth joints large, the latter forming a club. Prothorax widely transverse, sides strongly rounded and distinctly margined, apex gently incurved to middle and about half the width of base; with dense and small but sharply defined punctures. Elytra slightly wider than prothorax, sides distinctly margined; with dense and rather coarse punctures. Under-surface with dense and sharply defined but not very large punctures, larger on sides of metasternum and on basal segment of abdomen than elsewhere. Length, 1·5 mm.

Hab. Queensland: Cairns district (A. M. Lea). Type (unique), I. 11797.

Very distinct by the coarse punctures and distinct markings of elytra; the latter may be variable; on the type they consist, on each elytron, of a small spot on the shoulder, a somewhat S-shaped mark extending, near the suture, from close to the base to the middle, and an elliptical mark (enclosing a dark spot) obliquely placed on the apical third. The margin of each elytron, on its apical third, appears as a series of three short straight lines, instead of being evenly rounded.

APHANOCEPHALUS NITIDUS sp. nov.

Black, sides of prothorax, tips of elytra and most of under-surface obscurely paler, elytral epipleurae and legs still paler. Under-surface and legs finely pubescent, upper-surface scarcely visibly so.

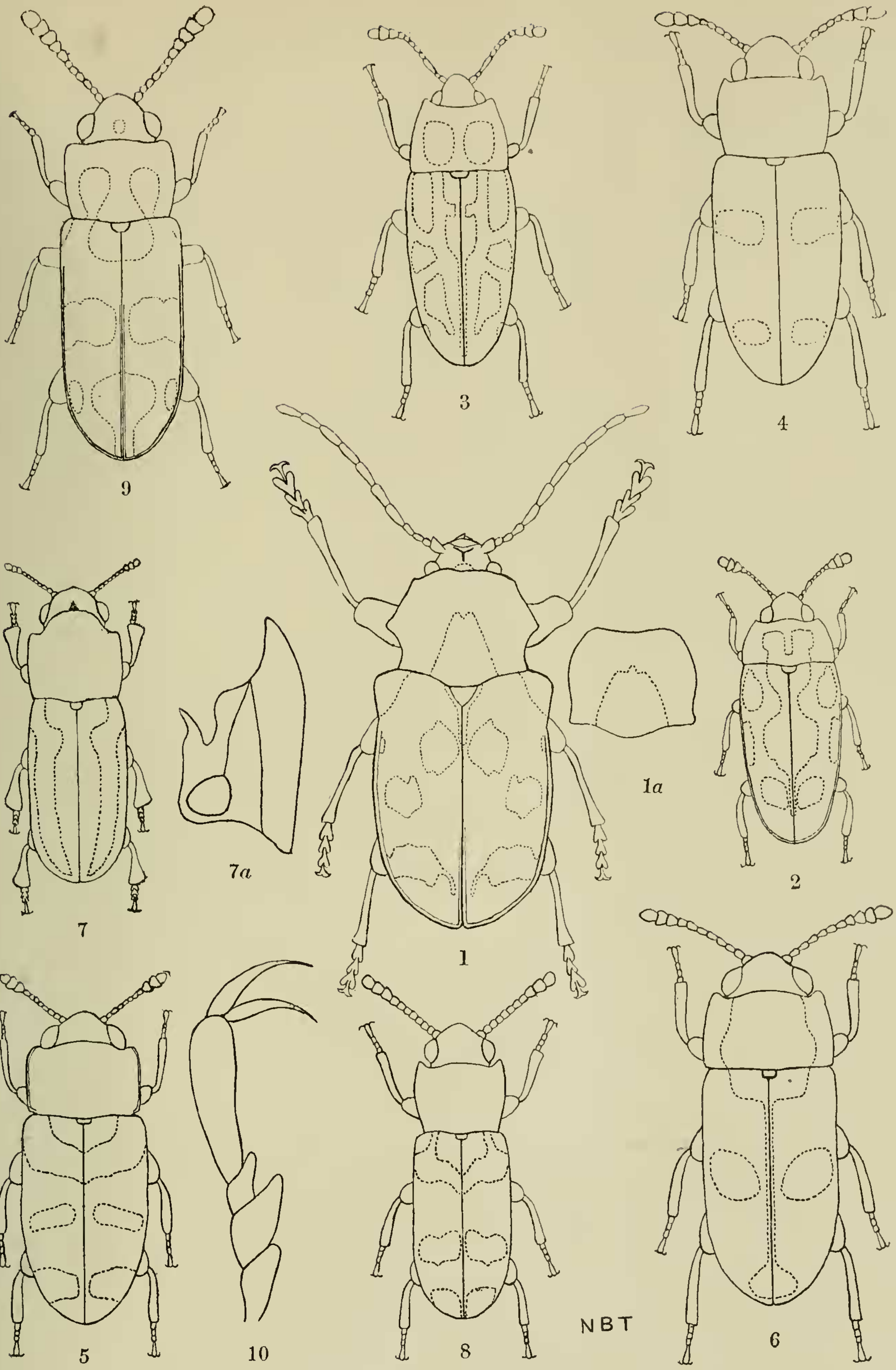
Head with dense punctures, sharply defined near base, but much less distinct in front. Antennae with ninth joint forming a rather large truncated club. Prothorax widely transverse, sides strongly rounded and finely margined, apex incurved to middle and scarcely half the width of base; with dense and small but rather sharply defined punctures. Elytra with outlines continuous with those of prothorax, but margins somewhat wider; the punctures somewhat sparser and slightly larger. Under-surface with dense punctures, slightly larger on sides of metasternum and on basal segment of abdomen than on elytra. Length, 2·25–2·5 mm.

Hab. Queensland: Mount Tambourine (A. M. Lea). Type, I. 11798.

Larger and more shining than *A. punctulatus* and *A. potamophilus*, upper-surface with very indistinct pubescence, and punctures much smaller. A second specimen is somewhat smaller and paler than the type.

Explanation of Plate iv.

Fig. 1. *Macrogonus maculatus* Lea. 1a, prothorax of female.
Fig. 2. *Episcaphula nigronotata* Lea.
Fig. 3. *Episcaphula atromaculata* Lea.
Fig. 4. *Thallis vinula* Er.
Fig. 5. *Thallis alternata* Lea.
Fig. 6. *Thallis subtuberculata* Lea.
Fig. 7. *Thallis hoplostetha* Lea. 7a, side view of prosternum of male.
Fig. 8. *Thallis metasternalis* Lea.
Fig. 9. *Thallis tricolor* Lea.
Fig. 10. *Erotendomychus bimaculatus* Lea, tarsus.



AUSTRALIAN BEETLES